

ABSTRACT

It is an object of the present invention to provide a laser irradiation apparatus and a laser irradiation method which can conduct a laser process homogeneously to the whole surface of a semiconductor film. A laser beam oscillated from a laser crystal having a wide wavelength range and a beam homogenizer are used. Since the laser beam having a wide wavelength range has low coherency, an interference pattern does not appear on a semiconductor film. Moreover, a linear beam having a length of several meters or more in its major axis can be formed, which increases throughput of a laser anneal process.

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